

CLAIMS

1-7. (Cancelled)

8. (Previously Presented) An apparatus for cutting a non-metallic substrate, comprising:

a first laser beam generating means that generates a first laser beam for breaking molecular bonds of the non-metallic substrate material so as to heat a cutting path formed on the non-metallic substrate and to form a scribe line having a crack to a desired depth; and

a second laser beam generating means that generates a second laser beam for propagating the crack along a scanning path of the first laser beam in a depth direction of the substrate,

wherein the apparatus cuts the non-metallic substrate without a cooling device.

9. (Original) The apparatus of claim 8, wherein the first laser beam has a wavelength having an absorptivity of 90% or more with respect to the non-metallic substrate.

10. (Original) The apparatus of claim 9, wherein the first laser beam is a 4.sup.th harmonics YAG laser beam having a wavelength of 266 nm.

11. (Original) The apparatus of claim 8, wherein the second laser beam is a CO₂ laser beam.

12. (Original) The apparatus of claim 8, wherein the first laser beam has a width less than that of the second laser beam.

13. The apparatus of claim 8, wherein the second laser beam is directly scanned onto the scribe line.